

# Work Order ID 80089

February-09-12 4:29:16 PM

**\*80089\***

Page 1

Item ID: D2965 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Cap, 105 Skidtube  
 Start Date: 09/02/2012 Start Qty: 30.00 <sup>30</sup>  
 Required Date: 23/02/2012 Req'd Qty: 30.00 ~~\*30\*~~  
 Reference: ~~\*30\*~~ Cust Item ID:  
 Customer:

Approvals: Process Plan: MLJ Date: 12/02/10 Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2965	Rev B

100 PURCHASING 0.00  
**\*100\***  
 Purchasing Memo 0.00  
 Purchasing Issue P/O: 16164 Cast per Dwg D2965 Material Release Note Required

CD 12/02/10 50

110 Receive & Inspect for Damage & Mat'l Certs 0.00  
**\*110\***  
 Packaging Memo 0.00  
 Packaging Ensure Material Release Note is attached

144/23 (50)

120 QC6- Inspect dimensions to drawing 0.00  
**\*120\***  
 QC Memo 0.00  
 Quality Control

counts  
(50)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng. Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80089

\*80089\*

Page 2

February-09-12 4:29:16 PM

Item ID: D2965

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Cap, 105 Skidtube

Start Date: 09/02/2012 Start Qty: 30.00

\*30\*

Cust Item ID:

Required Date: 23/02/2012 Req'd Qty: 30.00

\*30\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

0.00

\*130\*

Small Fab

Small Fab

Memo

0.00

Small Fab

Drill as per Dwg D2965 with DT8538 Debur and Tumble

30 FF 12-03-07

140

QC6- Inspect dimensions to drawing

0.00

\*140\*

QC

Memo

0.00

Quality Control

5.76369

count  
48  
as per

150

Powdercoat

0.00

\*150\*

Powdercoat

Memo

0.00

Powder Coating

Mask as per Dwg D2965 Powder To match Skidtube(Ref: 4.3.5.x) as per QSI 005 4.3

START TIME: 7h30

OVEN TEMPERATURE:

FINISH TIME: 8h00

320°F

m/20222

50 12/03/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*80089\***

Page 3

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**\*30\***

**Cust Item ID:**

**\*30\***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Tooling:**

Date:

Stop **\*NR2\***

**SPC (Y/N):**

Date:

**Insp.  
Stamp**

0.00

**\*160\***

QC

## Memo

0.00

## Quality Control

170

0.00

**\*170\***

## HandFinishing

HandFinish

## Memo

0.00

## Hand Finishing

Install Inserts as per Dwg D2965

180

QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

OC

## Memo

0.00

## Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 80089

\*80089\*

Page 4

February-09-12 4:29:16 PM

Item ID: D2965

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Cap, 105 Skidtube

Start Date: 09/02/2012 Start Qty: 30.00

\*30\*

Cust Item ID:

Required Date: 23/02/2012 Req'd Qty: 30.00

\*30\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

190

Identify as per dwg & Stock Location: FR-2

0.00

\*190\*

Packaging

Memo

0.00

Packaging

x50  
counted

12/13/25

200

QC21- Final Inspection - Work Order Release

0.00

\*200\*

QC

Memo

0.00

Quality Control

12/13/29

12/03/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

February-09-12 4:29:20 PM

Page 1

Work Order ID: 80089

\*80089\*

Parent Item: D2965

\*D2965\*

Parent Item Name: Cap, 105 Skidtube

Start Date: 09/02/2012

Required Date: 23/02/2012

Start Qty: 30.00

Required Qty: 30.00

## Comments:

IPP: A00.05.31New Issue EC

IPP Rev:Added Turning as per Rev B 06-12-15 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

ALS7-1032-225

Purchased

No

170

Each

1,162.000

2

100

100

\*AI S7-1032-225\*

INSERT

ALS4-1032-225

\*\*

1120671

11

12/03/28

### Location

### Loc Qty

### Loc Code

ST282

1162

100896

135

111529

27

118520

1000

D2965P

Purchased

No

170

Each

0.0000

1

30

\*D2965P\*

Cap

\*\*

10112/423 (50)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

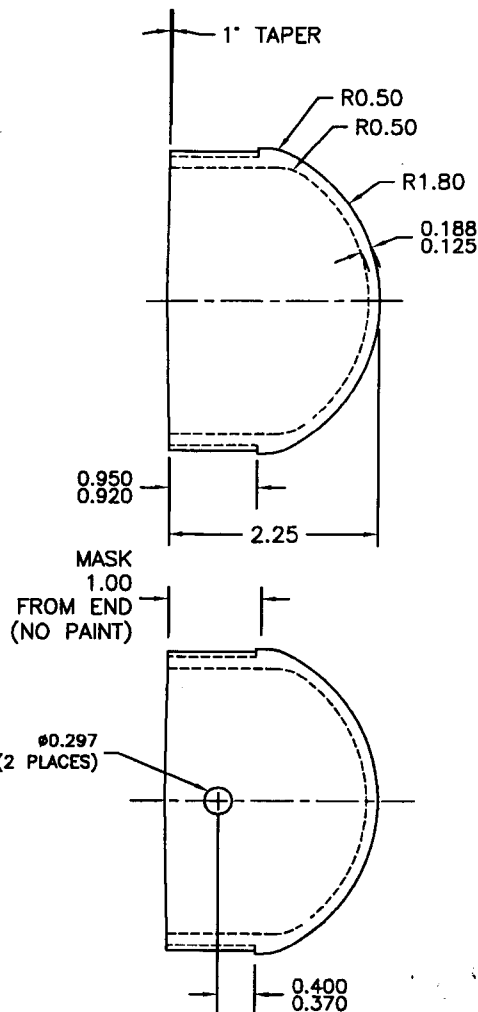
**NOTE:** Date & initial all entries

**DART**

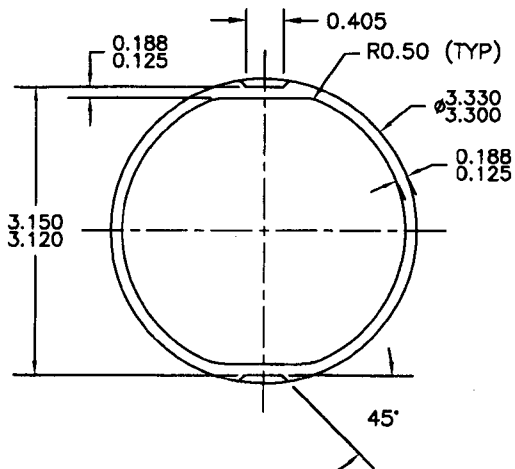
RELEASED

06.12.12

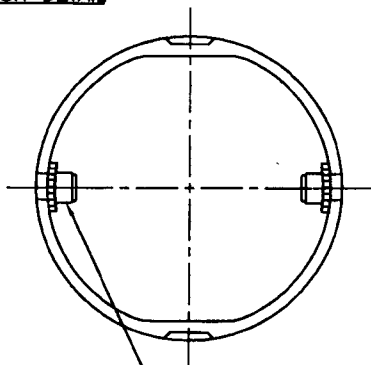
DESIGN	DRAWN BY	DART AEROSPACE USA, INC.	
PH	PH	PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. B
PH	PH	D2965	SHEET 1 OF 2
DATE	TITLE	SCALE	
06.11.01	CAP	1:2	
A	00.02.24	NEW ISSUE	
B	06.11.01	ADD -3 CAP	



D2965 CASTING DETAIL



D2965 FINISH DETAIL



INSTALL AELS-1032-225 INSERT  
(2 PLACES)

D2965 CAP

- 1) MATERIAL: CAST ALUMINUM ALLOY A356.2 (F)
- 2) FINISH: POWDER COAT PER QSI 005 4.3 TO MATCH REST OF SKIDTUBE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE INCHES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

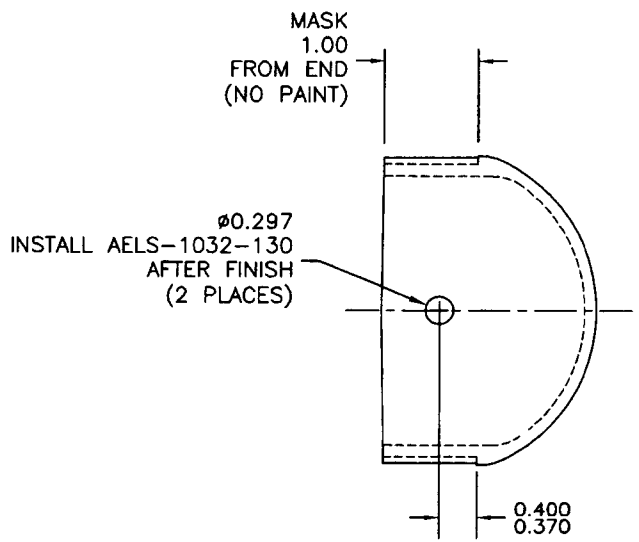
**NOTE:** Date & initial all entries



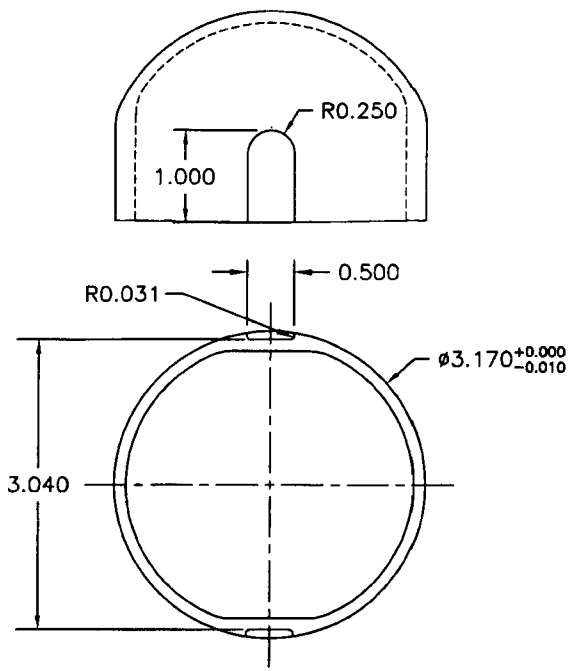
DESIGN	HY	DRAWN BY	HY	DART AEROSPACE USA, INC.
CHECKED	HY	APPROVED	HY	PORT HADLOCK, WA
DATE	06.11.01	DRAWING NO.	D2965	REV. B
		TITLE	CAP	SHEET 2 OF 2
		SCALE	1:2	

RELEASED  
06.12.02

80089



D2965-3 FINISH DETAIL



D2965-3 CAP MACHINING DETAIL  
(MAKE FROM D2965 CAP)

D2965-3 CAP

- 1) MATERIAL: MAKE FROM D2965 CAP
- 2) FINISH: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE INCHES

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Copyright © 2000 by DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO16164**

Purchase Order Date 2/10/12

PO Print Date 2/13/12

Page Number 1 of 1

**Order From :**

VC-ALU001

ALUMINUM FOUNDRY & PATTERN WORKS LTD.  
2225 CHEMIN ST. FRANCOIS  
DORVAL, QC H9P 1K3  
CA

**Contact Name**

**Vendor Phone**

514 683 9777

**Vendor Fax**

514 683 0375

**Vendor Account Nbr**

**Buyer**

Chantal Lavoie

**Requisition Nbr**

**Tax Resale Nbr**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

**Ship To :**

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

*REVISED*

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2965P	Cap	2/24/12 Yes	50.00 Each	FedEx PI collect	\$21.2000	\$1,060.00

**Special Inst:** AS PER DWG D2965 REV. B  
B80089  
MATERIAL CAST ALUMINUM ALLOY  
A356.2 (F)

**PO Total:**

**\$1,060.00**

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Change Nbr: 2

Change Date: 2/13/12

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

# Aluminum Foundry Ltd

2225 Chemin St. Francois  
Dorval, Québec H9P 1K3  
Tel: (514) 683-9777  
Fax: (514) 683-0375  
email: info@foundryafpw.com

## Packing Slip

Packing Slip No.: 34002  
Shipped Date: 22 02 2012

<b>Sold to:</b>	<b>Ship to:</b>
<b>DART AEROSPACE</b> 1270 ABERDEEN STREET HAWKSBURY, ONTARIO K6A 1K7  Tel. (613) 632-5200 Fax (613) 632-5246	<b>DART AEROSPACE</b> 1270 ABERDEEN STREET HAWKSBURY, ONTARIO K6A 1K7
<b>Order No.:</b> 16164	
<b>Shipped By:</b> Fedex collect	
<b>Tracking No.:</b>	

Item No.	Unit	Description	Quantity
Z200080	Each	D2965 CAP	50
<div>Received by:</div> <div>Date:</div>			
Comment:			



CERTIFICAT DE CONFORMITÉ  
CERTIFICATE OF COMPLIANCEFONDERIE D'ALUMINIUM ET MODELERIE (1988) LTEE  
ALUMINUM FOUNDRY & PATTERN WORKS (1988) LTD2225 CHEMIN ST. FRANCOIS, DORVAL, QC H9P-1K3  
TEL : (514) 683-9777 FAX: (514) 683-0375Expédié à  
Shipped**DART AEROSPACE**

A.F. &amp; P.W. Série no./Serial no.

**1270 Aberdeen Street**

Packing

Date: **22/02/2012** Slip No. **34002****Hawksbury, ON, K6A 1K7**Vôtre No. Commande **16164**

Your order No.

Ceci est pour certifier que le matériel liste ci-dessous est selon les spécifications du bon d'achat ci-haut, et que les documents en évidence des rapports et certificats de détaillants sont en filière dans notre bureau.

This is to certify that the material listed below is according to your specifications on above P.O. and that documentary evidence of the tests or release certificates from the original supplier are on file in this office.

Quantité Quantity	Description	Notre No. Our No.	Spécifications	Note d'autorisation Incoming Release note
50	D 2965 CAP <i>51763/61</i>	Z200080	<u>A356.2</u>	Ingot#856449-14 B# 1205201

Analyse  
Analysis (as in ingot)

(Si)	7.2%	(Al)	balance
(Fe)	0.11%		
(Cu)	0.04%		
(Mn)	0.01%		
(Mg)	0.40%		
(Zn)	<0.01%		
(Ti)	0.12%		

Donne  
Yield :Résistance à la tension :  
Tensile Strength :Allongement par pouce carré :  
P.S.I. Elongation :

%

Pour et au nom de  
For and on behalf of :FONDERIE D'ALUMINIUM ET MODELERIE (1988) LTEE  
ALUMINUM FOUNDRY & PATTERN WORKS (1988) LTDDept/Dep :  
Par/Per :

Coc-100